Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=6; day=17; hr=11; min=7; sec=24; ms=56; ]

\_\_\_\_\_

### 

Reviewer Comments:

<110> APPLICANT: Novartis AG

<120> TITLE OF INVENTION: Organic Compound

<130> FILE REFERENCE: 4-32761P1/UNZ

<140> CURRENT APPLICATION NUMBER: 10538201

<141> CURRENT FILING DATE:2006-03-08

<160> NUMBER OF SEQ ID NOS: 48

<170> SOFTWARE: PatentIn version 3.1

Please remove all subject line headers from the entire sequence listing. Example: "<110> APPLICANT: Novartis AG." should be "<110> Novartis AG.". This type of errors are seen globally throughout the sequences in teh sequence listing. Please make all necessary changes.

<210> SEO ID NO 46

<211> LENGTH: 239

<212> TYPE: PRT

65

<213> ORGANISM: Pan paniscus

<400> SEQUENCE: 46

> Gly Lys Val Thr Glu Glu Val Val Ala Asn Met Pro Glu Gly Leu Thr 10

> Pro Asp Leu Val Gln Glu Ala Cys Glu Ser Glu Leu Asn Glu Val Thr 20 25 30

> Gly Thr Lys Ile Ala Tyr Glu Thr Lys Met Asp Leu Val Gln Thr Ser 40 4.5

> Glu Val Met Gln Glu Ser Leu Tyr Pro Ala Ala Gln Leu Cys Pro Ser 55

> Phe Glu Glu Ser Glu Ala Thr Pro Ser Pro Val Leu Pro Asp Ile Val 70 75

80

Met	Glu	Ala	Pro	Leu	Asn	Ser	Ala	Val	Pro	Ser	Ala	Gly	Ala	Ser	Ala
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Val	Gln	Pro	Ser	Ser	Ser	Pro	Leu	Glu	Ala	Ser	Ser	Val	Asn	Tyr	Glu
			100					105					110		
Ser	Ile	Ile	His	Glu	Pro	Glu	Asn	Pro	Pro	Pro	Tyr	Glu	Glu	Ala	Met
		115					120					125			
Ser	Val	Ser	Leu	Lys	Lys	Val	Ser	Gly	Ile	Lys	Glu	Glu	Ile	Lys	Glu
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Pro	Glu	Ser	Ile	Asn	Ala	Ala	Val	Gln	Glu	Thr	Glu	Ala	Pro	Tyr	Ile
145					150					155					160
Ser	Ile	Ala	Cys	Asp	Leu	Ile	Lys	Glu	Thr	Lys	Leu	Ser	Ala	Glu	Pro
				165					170					175	
Thr	Pro	Asp	Phe	Ser	Asp	Tyr	Ser	Glu	Met	Ala	Lys	Val	Glu	Gln	Pro
			180					185					190		
Val	Pro	Asp	His	Ser	Glu	Leu	Val	Glu	Asp	Ser	Ser	Pro	Asp	Ser	Glu
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Pro	Val	Asp	Leu	Phe	Ser	Asp	Asp	Ser	Ile	Pro	Asp	Val	Pro	Gln	Lys
	210					215					220				
Gln	Asp	Glu	Ala	Val	Met	Leu	Val	Lys	Glu	Asn	Leu	Pro	Glu	Thr	
225					230					235					

Miss-aligned Amino Acid numbering at position 18 onwards, Please correct the error.

\*\*\*\*\*\*\*\*\*\*\*

# Validated By CRFValidator v 1.0.3

Application No: 10538201 Version No: 2.0

Input Set:

Output Set:

**Started:** 2010-06-09 19:47:41.666

**Finished:** 2010-06-09 19:47:49.232

**Elapsed:** 0 hr(s) 0 min(s) 7 sec(s) 566 ms

Total Warnings: 15

Total Errors: 13

No. of SeqIDs Defined: 48

Actual SeqID Count: 48

Error code		Error Description
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W	213	Artificial or Unknown found in <213> in SEQ ID (29)
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W	213	Artificial or Unknown found in <213> in SEQ ID (42)
E	323	Invalid/missing amino acid numbering SEQID (46) POS (18)
E	323	Invalid/missing amino acid numbering SEQID (46)at Protein (20)
E	323	Invalid/missing amino acid numbering SEQID (46) POS (23)
E	323	Invalid/missing amino acid numbering SEQID (46)at Protein (25)

### Input Set:

# Output Set:

**Started:** 2010-06-09 19:47:41.666 **Finished:** 2010-06-09 19:47:49.232

**Elapsed:** 0 hr(s) 0 min(s) 7 sec(s) 566 ms

Total Warnings: 15
Total Errors: 13
No. of SeqIDs Defined: 48

Actual SeqID Count: 48

Error code		Error Description										
E	323	Invalid/missing amino acid numbering SEQID (46) POS (28)										
E	323	Invalid/missing amino acid numbering SEQID (46)at Protein (30)										
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E	323	Invalid/missing amino acid numbering SEQID (46) at Protein (35)										
E	323	Invalid/missing amino acid numbering SEQID (46) POS (38)										
E	323	Invalid/missing amino acid numbering SEQID (46) at Protein (40)										
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E	323	Invalid/missing amino acid numbering SEQID (46)at Protein (45)										

#### SEQUENCE LISTING

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<110> APPLICANT: Novartis AG
<120> TITLE OF INVENTION: Organic Compound
<130> FILE REFERENCE: 4-32761P1/UNZ
<140> CURRENT APPLICATION NUMBER:10538201
<141> CURRENT FILING DATE:2006-03-08
<160> NUMBER OF SEO ID NOS: 48
<170> SOFTWARE: PatentIn version 3.1
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<212> TYPE: PRT
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<222> LOCATION: (1)..(18)
<223> OTHER INFORMATION: rat NogoA_623-640
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<211> LENGTH: 221
<212> TYPE: PRT
<213> ORGANISM: Mus musculus
<220> FEATURE:
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<222> LOCATION: (1)..(221)
<223> OTHER INFORMATION: Variable part of Heavy Chain of 11C7 with leader sequence
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                                 25
     Gly Gly Ser Leu Lys Leu Ser Cys Val Val Ser Gly Phe Asp Phe Arg
            35 40
                                                45
     Arg Asn Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu
                          55
     Trp Ile Gly Glu Ile Asn Pro Asp Ser Ser Lys Ile Asn Tyr Thr Pro
                70
                              75
     Ser Leu Lys Asp Lys Phe Ile Ile Ser Arg Asp Asn Ala Lys Asn Thr
                       90
     Leu Tyr Leu Gln Val Ser Thr Val Arg Ser Glu Asp Thr Ala Leu Tyr
                                 105
                100
     Tyr Cys Val Arg Pro Val Trp Met Tyr Ala Met Asp Tyr Trp Gly Gln
            115
                             120
                                                125
     Gly Thr Ser Val Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser Val
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             150 155
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                   165 170
     Trp Asn Ser Gly Ser Leu Ser Ser Gly Val His Thr Phe Pro Ala Val
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<212> TYPE: PRT

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<222> LOCATION: (1)..(238)

<223> OTHER INFORMATION: Light Chain of 11C7 with leader sequence

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20 25 30

Thr Ile Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu 35 40 45

Leu His Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro 50 60

Gly Gln Ser Pro Lys Arg Leu Ile Tyr Leu Val Ser Lys Leu Asp Ser 65 70 75 80

Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr 85 90 95

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Tyr Cys
100 105 110

Trp Gln Gly Thr His Phe Pro Gln Thr Phe Gly Gly Gly Thr Lys Leu 115 120 125

Glu Ile Lys Arg Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro 130 135 140

Ser Ser Glu Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe Leu 145 150 155 160

Asn Asn Phe Tyr Pro Lys Asp Ile Asn Val Lys Trp Lys Ile Asp Gly
165 170 175

Ser Glu Arg Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln Asp Ser 180 185 190

Lys Asp Ser Thr Tyr Ser Met Ser Ser Thr Leu Thr Leu Thr Lys Asp 195 200 205

Glu Tyr Glu Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His Lys Thr 210 215 220

Ser Thr Ser Pro Ile Val Lys Ser Phe Asn Arg Gly Glu Cys 225 230 235

<210> SEQ ID NO 4

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<212> TYPE: DNA

<213> ORGANISM: Homo sapiens

<220> FEATURE:

<221> NAME/KEY: CDS

<222> LOCATION: (1)..(3579)

<223> OTHER INFORMATION: Human NogoA

<400> SEQUENCE: 4

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gac	gag	gag	gaa	gaa	gag	gag	gag	gaa	gag	gag	gac	gag	gac	gaa	gac	144
Asp	Glu	Glu 35	Glu	Glu	Glu	Glu	Glu 40	Glu	Glu	Glu	Asp	Glu 45	Asp	Glu	Asp	
ctg	gag	gag	ctg	gag	gtg	ctg		agg	aag	ccc	gcc		ggg	ctg	tcc	192
Leu	Glu	Glu	Leu	Glu	Val	Leu	Glu	Arg	Lys	Pro	Ala	Ala	Gly	Leu	Ser	
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	_	cca Pro				-		_	_				_	_	_	240
65	1114	110	vai	110	70	mu	110	1114	1114	75	ma	110	шец	1100	80	
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Phe	Gly	Asn	Asp	Phe	Val	Pro	Pro	Ala	Pro	Arg	Gly	Pro	Leu	Pro	Ala	
				85					90					95		226
_		ccc Pro	_	_	_			_	_			-	_	_	_	336
IIIa	110	110	100	IIIG	110	Olu	1119	105	110	DCI	TTP	1155	110	DCI	110	
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Val	Ser	Ser	Thr	Val	Pro	Ala	Pro	Ser	Pro	Leu	Ser	Ala	Ala	Ala	Val	
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-		tcc Ser	-				-	-			-	-				432
501	130	DCI	2,0	Lea	110	135	1101	1101	OIG	110	140	1114	1119	110	110	
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Pro	Pro	Pro	Pro	Ala	Ser	Val	Ser	Pro	Gln	Ala	Glu	Pro	Val	Trp	Thr	
145					150					155					160	500
_		gcc Ala	_	-		-						-	-			528
110	110	AIG	110	165	110	AIG	AIG	110	170	Del	1111	110	AIG	175	110	
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110	1114	195	DCI	Olu	110	vai	200	1119	DCI	DCI	ma	205	11011	1100	1155	
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Leu	_	Glu	Gln	Pro	Gly		Thr	Ile	Ser	Ala	_	Gln	Glu	Asp	Phe	
999	210	~+ ~	a+ ~	~++	~	215	a a t	~~+	+ a+	a++	220	+ ~+	a+ a	+ ~+	a a t	720
		gtc Val	-		-		-	-					_			720
225					230					235					240	
ctc	tca	gcc	gct	tct	ttc	aaa	gaa	cat	gaa	tac	ctt	ggt	aat	ttg	tca	768
Leu	Ser	Ala	Ala		Phe	Lys	Glu	His		Tyr	Leu	Gly	Asn		Ser	
	art a	++-	~~~	245	~~~			~++	250	~~~	+	~+ ~		255	a. a. t	016
	_	tta Leu			_					-		-	-	-	_	816
			260			1		265					270			
tct	aaa	gag	gtc	tca	gag	aag	gca	aaa	act	cta	ctc	ata	gat	aga	gat	864
Ser	Lys	Glu	Val	Ser	Glu	Lys		Lys	Thr	Leu	Leu		Asp	Arg	Asp	
++-	262	275	+++	+ ~ ~	~~~	++-	280	+	+ ~ ~	~~~	a+~	285	+ ~ ~	+ ~~	++~	010
		gag Glu			_		_			-	_			_		912
	290					295		- 1 -			300	1				
agt	gtc	tct	cca	aaa	gca	gaa	tct	gcc	gta	ata	gta	gca	aat	cct	agg	960

	Val	Ser	Pro	Lys		Glu	Ser	Ala	Val		Val	Ala	Asn	Pro	-	
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_	Glu							_	-	-		_		-	=	1000
				325	_		_	_	330			_		335		
aat	aac	atc	ctt	cat	aat	caa	caa	gag	tta	cct	aca	gct	ctt	act	aaa	1056
Asn	Asn	Ile	Leu	His	Asn	Gln	Gln	Glu	Leu	Pro	Thr	Ala	Leu	Thr	Lys	
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_	gtt			-	_	-				-		-		-	_	1104
Leu	Val	тув 355	GIU	Asp	GIU	vai	360	ser	ser	GIU	гуз	365	гуз	Asp	ser	
ttt	aat		aag	aga	gtt	gca		gaa	gct	cct	atg		gag	gaa	tat	1152
Phe	Asn	Glu	Lys	Arg	Val	Ala	Val	Glu	Ala	Pro	Met	Arg	Glu	Glu	Tyr	
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	Asp	Phe	Lys	Pro		Glu	Arg	Val	Trp		Val	Lys	Asp	Ser	-	
385	gat	a ort	a a t	a t a	390	aat	aat	aas	aat	395	at a	aza	200	220	400	1248
_	Asp	_	-	_	_	-	-						-		=	1240
	1-		1-	405				2	410					415		
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Glu	Ser	Lys	Val	Asp	Lys	Lys	Cys	Phe	Ala	Asp	Ser	Leu	Glu	Gln	Thr	
			420					425					430			
	cac	-		-	-		-	-		-	-					1344
Asn	His	435	гуз	Asp	ser	GIU	ser 440	ser	ASN	Asp	Asp	445	ser	Pne	Pro	
agt	acq		qaa	aat	ata	aaq		cat	tca	qqa	qca		atc	aca	tat	1392
_	Thr		-			_	-	-			-				_	
	450					455					460					
gct	ccc	ttt	aac	cca	gca	gca	act	gag	agc	att	gca	aca	aac	att	ttt	1440
	Pro	Phe	Asn	Pro		Ala	Thr	Glu	Ser		Ala	Thr	Asn	Ile		
465	++~	++>	aas	a a t	470	agt	+ a =	<b>~</b> ~ ~ ~	2 2 ±	475	3.00	a a t	~~~	222	480	1488
	ttg Leu			_				-		_		_	-			1400
			1	485					490	-1 -		1-		495	-1 -	
ata	gaa	gaa	aag	aag	gcc	caa	ata	gta	aca	gag	aag	aat	act	agc	acc	1536
Ile	Glu	Glu	Lys	Lys	Ala	Gln	Ile	Val	Thr	Glu	Lys	Asn	Thr	Ser	Thr	
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	aca						-	-	-	_	-				_	1584
ьуз	Thr	515	ASII	PIO	Pne	Leu	520	Ala	Ala	GIII	Asp	525	GIU	Inr	Asp	
tat	gtc		aca	gat	aat	tta		aaq	gtg	act	gag		gtc	gtg	gca	1632
	Val															
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545	gaa	++~	a a t	~ = =	550	act	aat	202	220	555	act	t at	~ = =	202	560	1728
_	Glu	_		-	_				_		_		-			1720
				565			1		570			-1-		575	-1 -	
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Met	Asp	Leu	Val	Gln	Thr	Ser	Glu	Val	Met	Gln	Glu	Ser	Leu	Tyr	Pro	
			580					585					590			
_	gca Ala	_		_				-			_	-				1824
АІА	Ala	595	ьeu	cys	rro	ser	600	GIU	GIU	ser	GIU	A1a	ınr	rro	ser	
							000									
cca	gtt	tta	cct	gac	att	gtt	atσ	gaa	gca	cca	tta	aat	tct	gca	gtt	1872

Pro	Val	Leu	Pro	Asp	Ile		Met	Glu	Ala	Pro		Asn	Ser	Ala	Val	
	610					615					620					1000
	agt	-		-						_					-	1920
	Ser	Ala	GTÄ	Ala		vai	ire	GIN	Pro		ser	ser	Pro	Leu		
625					630					635					640	1060
_	tct		-			-	_						-			1968
Ala	Ser	ser	Val		туг	GIU	ser	TTe	_	нта	GIU	PIO	GIU		PIO	
		+ -+		645	~~~	a + ar	- art	art a	650	a+ a			art a	655		2016
	cca		_		-	_	-	_					-			2016
PIO	Pro	тут	660	GIU	АІА	Met	ser	665	ser	ьеи	туѕ	туѕ	670	ser	Gly	
a+a	aaq	~ = =		att	222	aaa	aat		aat	att	a a t	ac a		c++	Caa	2064
	Lys	-	-					_				_	_			2004
110	цур	675	Olu	110	шур	Olu	680	Olu	11011	110	11011	685	ma	±cu.	0111	
gaa	aca		act	cct	tat	ata		att	gca	t at	gat		att	aaa	паа	2112
_	Thr	_	_						_	_	_				=	
014	690	014	1114		- 1 -	695	201		1110	0,10	700	Lou		_,_	014	
aca	aag	ctt	tct	act	gaa	cca	act	ccq	gat	ttc	tct	gat	tat	tca	qaa	2160
	Lys			_	-		-	_	-			_			=	
705	-				710				-	715		-	_		720	
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Asp	Ser	Ser	Pro	Asp	Ser	Glu	Pro	Val	Asp	Leu	Phe	Ser	Asp	Asp	Ser	
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		755					760					765				
_	agt									_		-		-		2352
Glu	Ser	Leu	Thr	Glu	Thr		Phe	Glu	Ser	Met	Ile	Glu	Tyr	Glu	Asn	
	770					775					780					
_	gaa			_	_	_						_			=	2400
_	Glu	гуз	Leu	ser		Leu	Pro	Pro	Glu	_	GLY	гуз	Pro	Tyr		
785	+ ~+	+++	220	a+ a	790	++-	~ a t	224	2 4 2	795	~ a t		a+ a	++-	800	2449
_	tct Ser		_		_		_				-		_			2448
Giu	per	rne	пуз	805	per	ьeu	Asb	ASII	810	шуз	Asp	TIIL	ьeu	815	110	
gat	gaa	att	tca		tta	adc	aaa	aad		aaa	att	cct	tta		ato	2496
_	Glu	-			_	_		_					_	_	=	
1-			820					825		-1-			830			
gag																2544
	gag	ctc	agt	act	gca	gtt	tat	tca	aat	gat	gac	tta	ttt	att	TCT	2344
Glu	gag Glu		_		-	-				-	-					2344
Glu			_		-	-				-	-					2344
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aag	Glu	Leu 835 gca	Ser	Thr ata	Ala	Val gaa	Tyr 840 act	Ser gaa	Asn acg	Asp	Asp tca	Leu 845 gat	Phe tca	Ile tct	Ser	
aag Lys	Glu gaa Glu	Leu 835 gca Ala	Ser cag Gln	Thr ata Ile	Ala aga Arg	Val gaa Glu 855	Tyr 840 act Thr	Ser gaa Glu	Asn acg Thr	Asp ttt Phe	Asp tca Ser 860	Leu 845 gat Asp	Phe tca Ser	Ile tct Ser	Ser cca Pro	
aag Lys att	Glu gaa Glu 850	Leu 835 gca Ala att	Ser cag Gln ata	Thr ata Ile gat	Ala aga Arg	Val gaa Glu 855 ttc	Tyr 840 act Thr	Ser gaa Glu aca	Asn acg Thr	Asp ttt Phe	Asp tca Ser 860 agt	Leu 845 gat Asp	Phe tca Ser aaa	Ile tct Ser	Ser cca Pro gat	2592
aag Lys att	Glu gaa Glu 850 gaa	Leu 835 gca Ala att	Ser cag Gln ata	Thr ata Ile gat	Ala aga Arg	Val gaa Glu 855 ttc	Tyr 840 act Thr	Ser gaa Glu aca	Asn acg Thr	Asp ttt Phe	Asp tca Ser 860 agt	Leu 845 gat Asp	Phe tca Ser aaa	Ile tct Ser	Ser cca Pro gat	2592
aag Lys att Ile 865	Glu gaa Glu 850 gaa	Leu 835 gca Ala att Ile	Ser cag Gln ata Ile	Thr ata Ile gat Asp	Ala aga Arg gag Glu 870	Val gaa Glu 855 ttc Phe	Tyr 840 act Thr cct Pro	Ser gaa Glu aca Thr	Asn acg Thr ttg Leu	Asp ttt Phe atc Ile 875	Asp tca Ser 860 agt Ser	Leu 845 gat Asp tct Ser	Phe tca Ser aaa Lys	Ile tct Ser act Thr	Ser cca Pro gat Asp 880	2592
aag Lys att Ile 865 tca	Glu gaa Glu 850 gaa Glu	Leu 835 gca Ala att Ile	Ser cag Gln ata Ile	Thr ata Ile gat Asp	Ala aga Arg gag Glu 870 gcc	Val gaa Glu 855 ttc Phe	Tyr 840 act Thr cct Pro	Ser gaa Glu aca Thr	Asn acg Thr ttg Leu act	Asp ttt Phe atc Ile 875 gac	Asp tca Ser 860 agt Ser	Leu 845 gat Asp tct Ser	Phe tca Ser aaa Lys gta	tct Ser act Thr	cca Pro gat Asp 880 cac	2592 2640
aag Lys att Ile 865 tca Ser	Glu gaa Glu 850 gaa Glu ttt Phe	Leu 835 gca Ala att Ile tct Ser	Ser cag Gln ata Ile aaa Lys	Thr ata Ile gat Asp tta Leu 885	Ala aga Arg gag Glu 870 gcc Ala	Val gaa Glu 855 ttc Phe agg	Tyr 840 act Thr cct Pro gaa Glu	Ser gaa Glu aca Thr tat Tyr	Asn acg Thr ttg Leu act Thr 890	Asp ttt Phe atc Ile 875 gac Asp	Asp tca Ser 860 agt Ser cta Leu	Leu 845 gat Asp tct Ser gaa Glu	Phe tca Ser aaa Lys gta Val	tct Ser act Thr tcc Ser 895	Ser cca Pro gat Asp 880 cac His	2592 2640 2688
aag Lys att Ile 865 tca Ser	Glu gaa Glu 850 gaa Glu ttt Phe	Leu 835 gca Ala att Ile tct Ser	Ser cag Gln ata Ile aaa Lys att	Thr ata Ile gat Asp tta Leu 885 gct	Ala aga Arg gag Glu 870 gcc Ala aat	Val gaa Glu 855 ttc Phe agg Arg	Tyr 840 act Thr cct Pro gaa Glu	gaa Glu aca Thr tat Tyr	acg Thr ttg Leu act Thr 890 gga	Asp ttt Phe atc Ile 875 gac Asp	Asp tca ser 860 agt Ser cta Leu ggg	Leu 845 gat Asp tct Ser gaa Glu	Phe tca Ser aaa Lys gta Val ttg	tct Ser act Thr tcc Ser 895 cct	Ser  cca Pro  gat Asp 880 cac His	2592 2640
aag Lys att Ile 865 tca Ser	Glu gaa Glu 850 gaa Glu ttt Phe	Leu 835 gca Ala att Ile tct Ser	Ser  cag Gln  ata Ile  aaa Lys  att Ile	Thr ata Ile gat Asp tta Leu 885 gct	Ala aga Arg gag Glu 870 gcc Ala aat	Val gaa Glu 855 ttc Phe agg Arg	Tyr 840 act Thr cct Pro gaa Glu	gaa Glu aca Thr tat Tyr gat Asp	acg Thr ttg Leu act Thr 890 gga	Asp ttt Phe atc Ile 875 gac Asp	Asp tca ser 860 agt Ser cta Leu ggg	Leu 845 gat Asp tct Ser gaa Glu	tca ser aaa Lys gta Val ttg	tct Ser act Thr tcc Ser 895 cct	Ser  cca Pro  gat Asp 880 cac His	2592 2640 2688
aag Lys att Ile 865 tca Ser aaa Lys	Glu gaa Glu 850 gaa Glu ttt Phe	Leu 835 gca Ala att Ile tct Ser gaa Glu	Ser  cag Gln  ata Ile  aaa Lys  att Ile 900	Thr ata Ile gat Asp tta Leu 885 gct Ala	Ala aga Arg gag Glu 870 gcc Ala aat Asn	Val gaa Glu 855 ttc Phe agg Arg	Tyr 840 act Thr cct Pro gaa Glu ccg Pro	gaa Glu aca Thr tat Tyr gat Asp 905	acg Thr ttg Leu act Thr 890 gga Gly	Asp ttt Phe atc Ile 875 gac Asp gct Ala	Asp tca Ser 860 agt Ser cta Leu ggg	Leu 845 gat Asp tct Ser gaa Glu tca Ser	tca Ser aaa Lys gta Val ttg Leu 910	tct Ser act Thr tcc Ser 895 cct Pro	Ser  cca Pro  gat Asp 880 cac His  tgc Cys	2592 2640 2688

Thr Glu Leu Pro His Asp Leu Ser Leu Lys Asn Ile Gln Pro Lys Val 915 920 925

gaa gag aaa